

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: BERCH Examiner #: 59193 Date: 7/2
 Art Unit: 1624 Phone Number 30 8478 Serial Number: 09/982357
 Mail Box and Bldg/Room Location: 4D/5 Results Format Preferred (circle): PAPER DISK E-MAIL
4B5

If more than one search is submitted, please prioritize searches in order of need.

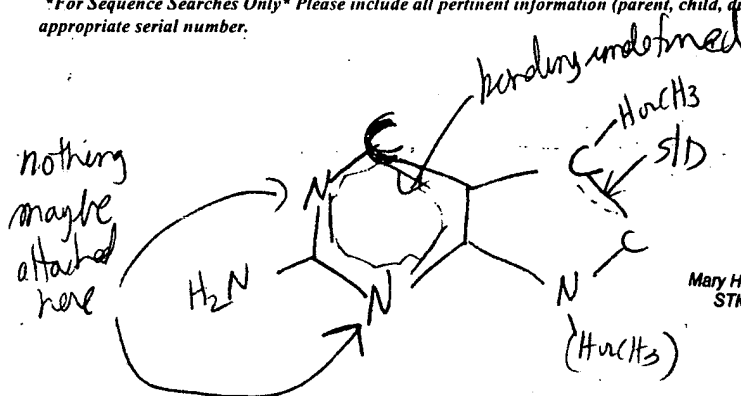
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.



Mary Hale - Supervisor, Info. Branch
 STIC - Biotech/Chem. Library
 CM-1 Room E01
 703-308-4258

MAR 1

RECEIVED
 JUL - 1 2007
 STIC
 149-59
 83-81
 30

I need bibs with that structure plus any of the following terms
 dihydrofolate, thymidylate, rTK, "receptor tyrosine kinase"
 cancer, VEGF, angiogenesis, EGF

If you get fewer than 5 BIBLIS, I also need a structure search - done without the words required to be

27, 29, 2

adenylate
 245
 present
 nine
 nucleotides
 10/12

STAFF USE ONLY

Type of Search

Vendors and cost where applicable

Searcher: Mary Hale NA Sequence (#) _____ STN 233.30
 Searcher Phone #: _____ AA Sequence (#) _____ Dialog _____
 Searcher Location: _____ Structure (#) 91 Questel/Orbit _____
 Date Searcher Picked Up: _____ Bibliographic _____ Dr. Link _____
 Date Completed: 7/9 Litigation 7/9 Lexis/Nexis _____
 Searcher Prep & Review Time: _____ Fulltext _____ Sequence Systems _____
 Clerical Prep Time: _____ Patent Family _____ WWW/Internet _____
 Online Time: 11 Other _____ Other (specify) _____

(FILE 'CAOLD' ENTERED AT 10:21:19 ON 09 JUL 2002)
DEL HIS Y

FILE 'REGISTRY' ENTERED AT 10:21:52 ON 09 JUL 2002

L1 STR
L2 1 S L1
L3 28 S L1 FUL
E DIHYDROFOLATE/CN 5
E THYMIDYLATE/CN 5
E RTK/CN 5
E RECEPTOR TYROSINE KINASE/CN 5
L4 1 S E3
E VEGF/CN 5
E ANGIOGENESIS/CN 5

FILE 'MEDLINE, HCAPLUS, EMBASE, JICST-EPLUS, BIOSIS' ENTERED AT 10:27:48
ON 09 JUL 2002

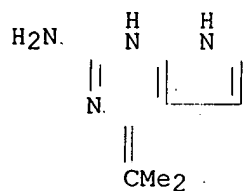
L5 0 FILE MEDLINE
L6 0 FILE HCAPLUS
L7 0 FILE EMBASE
L8 0 FILE JICST-EPLUS
L9 0 FILE BIOSIS
TOTAL FOR ALL FILES
L10 0 S L3 AND (L4 OR DIHYDROFOL? OR THYMIDYL? OR RTK OR RECEPTOR TYR
L11 0 FILE MEDLINE
L12 16 FILE HCAPLUS
L13 0 FILE EMBASE
L14 0 FILE JICST-EPLUS
L15 0 FILE BIOSIS
TOTAL FOR ALL FILES

Searched by: Mary Hale 308-4258 CM-1 1E01

(oligonucleotide contg. in place of guanine, diagnosis or inhibition of
nucleic acid function by triple helix formation with)

RN 150439-88-6 HCAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidin-2-amine, 4,7-dihydro-4-(1-methylethylidene)-
(9CI) (CA INDEX NAME)



L23 0 FILE MEDLINE
L24 15 FILE HCAPLUS
L25 0 FILE EMBASE
L26 0 FILE JICST-EPLUS
L27 0 FILE BIOSIS

TOTAL FOR ALL FILES

L28 15 L16 NOT L22

=> del his y

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE
ENTRY

TOTAL
SESSION
245.59

Buch
982351

FULL ESTIMATED COST

2.66

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE
ENTRY

TOTAL
SESSION
-3.72

CA SUBSCRIBER PRICE

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STRUCTURE FILE UPDATES: 8 JUL 2002 HIGHEST RN 437701-77-4
DICTIONARY FILE UPDATES: 8 JUL 2002 HIGHEST RN 437701-77-4

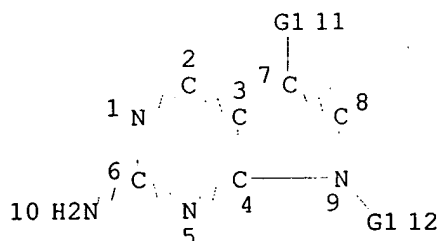
TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d l3 que stat;e dihydrofolate/cn 5
L1 STR



VAR G1=H/ME

NODE ATTRIBUTES:

CONNECT IS E2 RC AT 1

CONNECT IS E2 RC AT 5

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L3 28 SEA FILE=REGISTRY SSS FUL L1

Searched by: Mary Hale 308-4258 CM-1 1E01

100.0% PROCESSED 10380 ITERATIONS
SEARCH TIME: 00.00.01

28 ANSWERS

E1 1 DIHYDROFLUSTRAMINE C N-OXIDE/CN
E2 1 DIHYDROFMN/CN
E3 0 --> DIHYDROFOLATE/CN
E4 1 DIHYDROFOLATE DEHYDROGENASE/CN
E5 1 DIHYDROFOLATE FORMYLTRANSFERASE/CN

=> e thymidylate/cn 5

E1 1 THYMIDINE-T/CN
E2 1 THYMIDINE/PYRIMIDINE-NUCLEOSIDE PHOSPHORYLASE PROTEIN (RALST
ONIA SOLANACEARUM STRAIN GMI1000 GENE DEOA)/CN
E3 0 --> THYMIDYLATE/CN
E4 2 THYMIDYLATE 5'-NUCLEOTIDASE/CN
E5 2 THYMIDYLATE 5'-PHOSPHATASE/CN

=> e rtk/cn 5

E1 1 RTI-COC 32/CN
E2 1 RTI-W148-1/CN
E3 0 --> RTK/CN
E4 2 RTM 6/CN
E5 1 RTM 6 (EPOXY RESIN)/CN

=> e receptor tyrosine kinase/cn 5

E1 1 RECEPTOR TYPE GUANYLYL CYCLASE (BOMBYX MORI CLONE BM-GC-I)/C
N
E2 1 RECEPTOR TYPE TYROSINE PHOSPHATASE H/CN
E3 1 --> RECEPTOR TYROSINE KINASE/CN
E4 1 RECEPTOR TYROSINE KINASE (APLYSIA CALIFORNICA CLONE 2A/1A GE
NE ROR PRECURSOR)/CN
E5 1 RECEPTOR TYROSINE KINASE (CAENORHABDITIS ELEGANS GENE KIN-8)
/CN

=> s e3;d ide can

L4 1 "RECEPTOR TYROSINE KINASE"/CN

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

RN 340830-03-7 REGISTRY

CN Kinase (phosphorylating), receptor protein tyrosine (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Growth factor receptor kinase

CN Growth factor-receptor tyrosine kinase

CN Receptor protein kinase

CN Receptor protein tyrosine kinase

CN **Receptor tyrosine kinase**

MF Unspecified

CI MAN

SR CA

LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

90 REFERENCES IN FILE CA (1967 TO DATE)

91 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 137:18792

Searched by: Mary Hale 308-4258 CM-1 1E01

REFERENCE 2: 137:17453
REFERENCE 3: 137:15772
REFERENCE 4: 136:396038
REFERENCE 5: 136:381016
REFERENCE 6: 136:380176
REFERENCE 7: 136:380088
REFERENCE 8: 136:365565
REFERENCE 9: 136:363852
REFERENCE 10: 136:350606

=> e vegf/cn 5

E1 1 VEGETATIVE MYCELIUM HYDROPHOBIN 3 (PLEUROTUS OSTREATUS STRAI
N N001 GENE VMH3 PRECURSOR)/CN
E2 1 VEGETOX/CN
E3 0 --> VEGF/CN
E4 1 VEGF (CHICKEN)/CN
E5 1 VEGF (HUMAN 148-AMINO ACID ISOFORM)/CN

=> e angiogenesis/cn 5

E1 1 ANGIOFILINE/CN
E2 1 ANGIOFLEX/CN
E3 0 --> ANGIOGENESIS/CN
E4 1 ANGIOGENESIS ASSOCIATED PROTEIN HBAZF (HUMAN ORTHOLOG OF MOU
SE BAZF) (HUMAN)/CN
E5 1 ANGIOGENESIS ASSOCIATED PROTEIN HEF-G (HMT-ELONGATION FACTOR
G) (HUMAN)/CN

=> fil medl,hcap,embase,jicst,biosis;s 13 and (14 or dihydrofol? or thymidyl? or
rtk or receptor tyrosine kinase or 340830-03-7 or growth factor receptor kinase or
growth factor receptor tyrosine kinase)

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	149.48	395.07
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-3.72

FILE 'MEDLINE' ENTERED AT 10:27:48 ON 09 JUL 2002

FILE 'HCAPLUS' ENTERED AT 10:27:48 ON 09 JUL 2002

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FILE 'EMBASE' ENTERED AT 10:27:48 ON 09 JUL 2002

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FILE 'JICST-EPLUS' ENTERED AT 10:27:48 ON 09 JUL 2002

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FILE 'BIOSIS' ENTERED AT 10:27:48 ON 09 JUL 2002

Searched by: Mary Hale 308-4258 CM-1 1E01

L5 0 FILE MEDLINE
 L6 0 FILE HCAPLUS
 L7 0 FILE EMBASE
 L8 0 FILE JICST-EPLUS
 L9 0 FILE BIOSIS

TOTAL FOR ALL FILES

L10 0 L3 AND (L4 OR DIHYDROFOL? OR THYMIDYL? OR RTK OR RECEPTOR TYROSI
 NE KINASE OR 340830-03-7 OR GROWTH FACTOR RECEPTOR KINASE OR
 GROWTH FACTOR RECEPTOR TYROSINE KINASE)

=> s l3

L11 0 FILE MEDLINE
 L12 16 FILE HCAPLUS
 L13 0 FILE EMBASE
 L14 0 FILE JICST-EPLUS
 L15 0 FILE BIOSIS

TOTAL FOR ALL FILES

L16 16 L3

=> s l16 and (cancer or vegf or angigenesis or egf)

L17 0 FILE MEDLINE
 L18 1 FILE HCAPLUS
 L19 0 FILE EMBASE
 L20 0 FILE JICST-EPLUS
 L21 0 FILE BIOSIS

TOTAL FOR ALL FILES

L22 1 L16 AND (CANCER OR VEGF OR ANGIOGENESIS OR EGF)

=> d cbib abs hitstr;s l16 not l22

L22 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS

1993:575369 Document No. 119:175369 Formation of triple helix complexes of
 single stranded nucleic acids using oligonucleotides. Ts'O, Paul On Pong;
 Adams, Thomas Henry; Arnold, Lyle J., Jr. (Johns Hopkins University, USA;
 Genta Inc.). PCT Int. Appl. WO 9307295 A1 19930415, 98 pp. DESIGNATED
 STATES: W: AU, CA, FI, JP, KR, NO, RU; RW: AT, BE, CH, DE, DK, ES, FR,
 GB, GR, IE, IT, LU, MC, NL, SE. (English). CODEN: PIXXD2. APPLICATION:
 WO 1992-US8458 19921005. PRIORITY: US 1991-772081 19911007.

AB Triplex helix structure with a specific segment of single-stranded nucleic
 acid can be formed with 1st and 2nd oligomers comprised of nucleosidyl
 units linked by internucleosidyl phosphorus linkages. The 1st oligomer
 is sufficiently complementary to the target segment to form duplex and the
 2nd oligomer has .gtoreq.7 nucleotidyl units that are sufficiently
 complementary to hybridize with the duplex to form triplex. Upon
 formation of the triple helix the nucleic acids of interest may be
 detected and its function or expression prevented. The 1st and 2nd
 oligomers may comprise an oligonucleotide, an alkyl- or
 aryl-phosphonothioate oligomer, or other analogs, e.g. methylphosphonate
 oligomers. They may also contain uncharged neutral oligomers and purine
 or pyrimidine analogs, e.g., 2'-O-Me-pseudoisocytidine, 6-Se-guanine, or
 6-isopropylidene-7-deaza-guanidine. One of applications of this method is
 to inhibit in vivo synthesis of a protein by targeting its mRNA, which can
 be used for treatment of diseases, e.g. viral infections and
cancers.

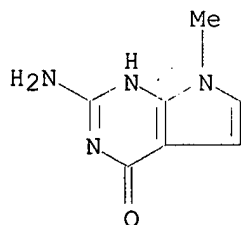
IT 150439-88-6

RL: USES (Uses)

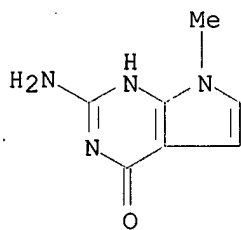
L16 16 S L3
 L17 0 FILE MEDLINE
 L18 1 FILE HCAPLUS
 L19 0 FILE EMBASE
 L20 0 FILE JICST-EPLUS
 L21 0 FILE BIOSIS
 TOTAL FOR ALL FILES
 L22 1 S L16 AND (CANCER OR VEGF OR ANGIOGENESIS OR EGF)
 L23 0 FILE MEDLINE
 L24 15 FILE HCAPLUS
 L25 0 FILE EMBASE
 L26 0 FILE JICST-EPLUS
 L27 0 FILE BIOSIS
 TOTAL FOR ALL FILES
 L28 15 S L16 NOT L22

=> d 1-15 cbib abs hitstr

L28 ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2002 ACS
 2002:159146 Document No. 136:369546 An Ab Initio Study of the Hydrogen Bond
 Energy of Base Pairs Formed between Substituted 9-Methylguanine
 Derivatives and 1-Methylcytosine. Kawahara, Shunichi; Uchimaru, Tadafumi;
 Taira, Kazunari; Sekine, Mitsuo (National Institute of Advanced Industrial
 Science and Technology (AIST), Tsukuba, Ibaraki, 305-8565, Japan).
 Journal of Physical Chemistry A, 106(13), 3207-3212 (English) 2002.
 CODEN: JPCAFH. ISSN: 1089-5639. Publisher: American Chemical Society.
 AB The substitution effect on hydrogen-bond energy of the Watson-Crick type
 base pair formation between 1-methylcytosine and chem. modified
 9-methylguanine derivs. was evaluated by an ab initio MO theory.
 Introduction of an electron-withdrawing group on the 8-position or on the
 exo-cyclic amino moiety enforced the hydrogen bond. Neither the charge
 distribution nor the sepn. between the hydrogen bonding sites is found to
 be directly correlated with the strength of the hydrogen bonds.
 IT 90065-66-0 425428-05-3
 RL: PRP (Properties)
 (ab initio study of hydrogen bond energy of base pairs formed between
 substituted methylguanine derivs. and methylcytosine)
 RN 90065-66-0 HCAPLUS
 CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-1,7-dihydro-7-methyl- (9CI) (CA
 INDEX NAME)



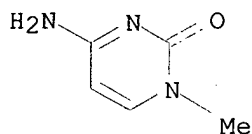
RN 425428-05-3 HCAPLUS
 CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-1,7-dihydro-7-methyl-, compd.
 with 4-amino-1-methyl-2(1H)-pyrimidinone (1:1) (9CI) (CA INDEX NAME)
 CM 1
 CRN 90065-66-0
 CMF C7 H8 N4 O



CM 2

CRN 1122-47-0

CMF C5 H7 N3 O



L28 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2002 ACS

1996:499170 Document No. 125:221073 The synthesis and determination of acidic ionization constants of certain 5-substituted 2-aminopyrrolo[2,3-d]pyrimidin-4-ones and methylated analogs. Hoops, Geoffrey C.; Park, Julie; Garcia, George A.; Townsend, Leroy B. (Interdepartmental Grad. Program Med. Chem., Univ. Michigan, Ann Arbor, MI, 48109-1065, USA). J. Heterocycl. Chem., 33(3), 767-781 (English) 1996. CODEN: JHTCAD. ISSN: 0022-152X.

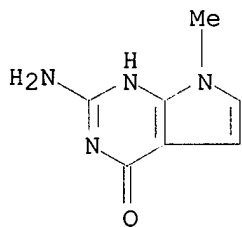
AB Acidic ionization consts. were detd. for a series of 5-substituted 2-aminopyrrolo[2,3-d]pyrimidin-4-ones and their N-3- and N-7-methylated analogs. The synthesis of the methylated analogs are also described.

IT 90065-66-0P 181480-33-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and detn. of acidic ionization consts. of aminopyrrolopyrimidinones)

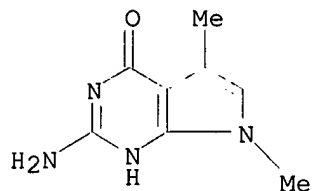
RN 90065-66-0 HCAPLUS

CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-1,7-dihydro-7-methyl- (9CI) (CA INDEX NAME)



RN 181480-33-1 HCAPLUS

CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-1,7-dihydro-5,7-dimethyl- (9CI) (CA INDEX NAME)

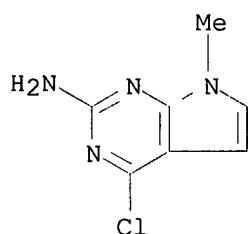


IT 90065-71-7P 181480-32-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and detn. of acidic ionization consts. of
aminopyrrolopyrimidinones)

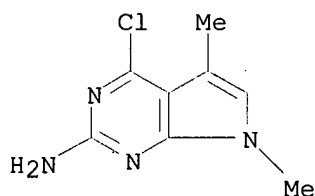
RN 90065-71-7 HCAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-2-amine, 4-chloro-7-methyl- (9CI) (CA INDEX
NAME)



RN 181480-32-0 HCAPLUS

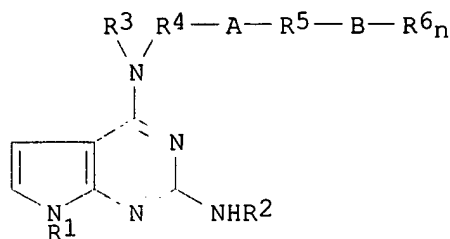
CN 7H-Pyrrolo[2,3-d]pyrimidin-2-amine, 4-chloro-5,7-dimethyl- (9CI) (CA
INDEX NAME)



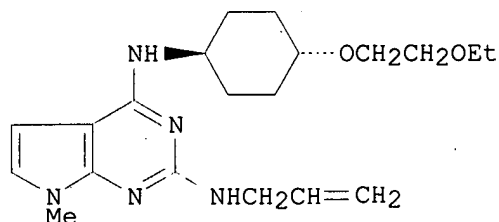
L28 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2002 ACS

1995:382828 Document No. 122:160677 Preparation of 4-(substituted alkyl
amino)pyrrolo[2,3-d]pyrimidine derivatives for treatment and prevention of
anoxia. Takenochi, Kazuya; Sakuma, Yasushi; Takeuchi, Takahiro; Furuya,
Minoru; Kadota, Takashi; Horiuchi, Hideki; Yamanaka, Yoshihiro; Komorya,
Keiji (Teijin Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 06329675 A2 19941129
Heisei, 14 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1993-118283
19930520.

GI



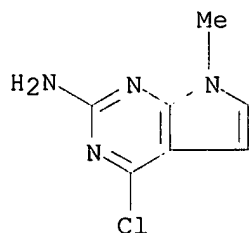
I



II

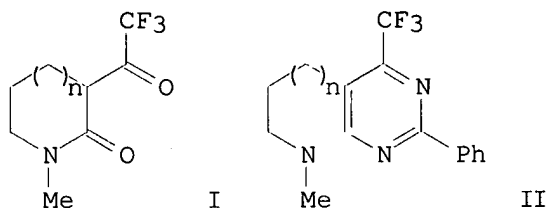
AB The title compds. (I; R1 = H, alkyl, alkenyl, aralkyl; R2 = alkyl, alkenyl, aralkyl; R3 = H, C1-3 alkyl; R4 = C1-6 alkylene; R5 = C2-6 alkylene, C6-10 arylene; R6 = H, C1-3 alkyl; A, B = O, S, NR, wherein R = H or C1-3 alkyl; when R5 = C2-6 alkylene, n = 1; when R5 = C6-10 arylene, n = 1-3) and pharmacol. acceptable salts are prepd. Thus, 5.00 g 2-amino-4-chloro-7H-pyrrolo[2,3-d]pyrimidine, 4.96 mL Et3N, and 10.08 g p-anisylchlorodiphenylmethane were stirred in DMF at room temp. for 30 min and cooled to 0.degree. followed by successively adding 4.50 mL MeI and 3.00 g NaH, reacting the resulting mixt. for 1 h, and successively adding 5.36 mL allyl iodide and 2.00 g NaH and the resulting mixt. was allowed to react for 1 h to give, after workup and silica gel chromatog., 53.1% 2-allylamino-4-chloro-7-methyl-7H-pyrrolo[2,3-d]pyrimidine (II). II 20.0, K2CO3 31.10, and LiI 15.6 g were added to a soln. of 33.6 g trans-4-(2-ethoxyethyl)cyclohexylamine in 60 mL BuOH in an autoclave and heated at 160.degree. and inner pressure 2-3 kgf/cm2 under N for 65 h to give, after workup and silica gel chromatog., 86% title compd. (III). III.H2SO4 was continuously administered at 0.1 mg/kg/min i.v. for 10 min to mice suffering anoxia in the state of breathing failure induced by injecting 2.0% aq. AcOH to the respiratory tract to show the increase in the partial pressure of O (PoO2) .DELTA.PoO2 = +13.7 mmHg, and the decrease in the partial pressure of CO2 in arterial blood (PoCO2) .DELTA.PoCO2 = -14.7 mmHg. Each tablet and injection formulation contg. III.H2SO4 were described.

IT 90065-71-7, 2-Amino-4-chloro-7-methyl-7H-pyrrolo[2,3-d]pyrimidine
 RL: RCT (Reactant)
 (alkylation with Me iodide and allyl iodide in prepn. of
 (alkylamino)pyrrolopyrimidine derivs. for treatment and prevention of
 anoxia)
 RN 90065-71-7 HCAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-2-amine, 4-chloro-7-methyl- (9CI) (CA INDEX
 NAME)



L28 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2002 ACS
 1994:508677 Document No. 121:108677 Trifluoromethylated pyrimidines starting from .beta.-trifluoroacetyl-lactams, -lactone and -cyclanone. Bouillon, Jean Philippe; Bouillon, Vincent; Wynants, Chantal; Janousek, Zdenek; Viehe, Heinz G. (Lab. Chim. Org., Louvain-la-Neuve, B-1348, Belg.). Heterocycles, 37(2), 915-32 (English) 1994. CODEN: HTCYAM. ISSN: 0385-5414. OTHER SOURCES: CASREACT 121:108677.

GI



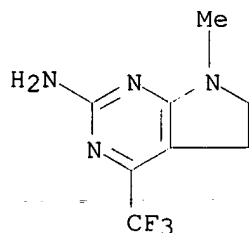
AB A prepn. of trifluoromethylated pyrimidines from .beta.-trifluoroacetyl-lactams and -benzolactams is accomplished by reaction with benzamidine as bis(nucleophile). This condensation is also extended to cyclic trifluoromethylated 1,3-diketones and 3-aryl-2-pyrrolidinones. Cyclocondensation of (trifluoroacetyl)lactams I (n = 0-2) gave the fused pyrimidines II (same n).

IT **156870-46-1P**

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 156870-46-1 HCAPLUS

CN 5H-Pyrrolo[2,3-d]pyrimidin-2-amine, 6,7-dihydro-7-methyl-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



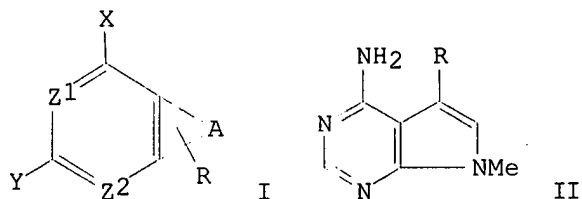
L28 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2002 ACS
 1991:608603 Document No. 115:208603 Preparation of N-
 [[(pyrrolopyrimidinyl)alkyl]benzoyl]glutamates and analogs as antitumor

Go

Searched by: Mary Hale 308-4258 CM-1 1E01

agents. Akimoto, Hiroshi; Ootsu, Koichiro (Takeda Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 438261 A2 19910724, 34 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1991-300266 19910115. PRIORITY: JP 1990-7962 19900116.

GI



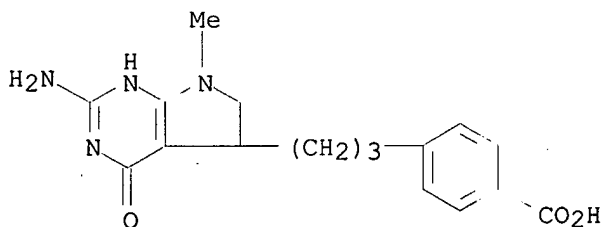
AB Title compds. [I; A = atoms to complete a 5-membered ring; R = ZBCONHCH(CO2R1)CH2CH2CO2R2; B = (un)substituted divalent cyclic or chain group (sic); R1, R2 = ester residue, cation; X = NH2, OH, SH; Y = H halo, (un)substituted OH, NH2, SH, hydrocarbyl; Z = (heteroatom-interrupted) (un)substituted (CH2)2-5; 1 of Z1, Z2 = N and the other = N or CH] were prepd. as antitumor agents (no data). Thus, pyrrolopyrimidine II (R = cyano) was heated 1.5 h at 75-80.degree. with Raney Ni in HCO2H and the product (II; R = CHO) was condensed with Ph3P+CH2C6H4(CO2Me)-4 Br- to give, after hydrogenation, II [R = CH2CH2C6H4(CO2Me)-4] which was sapond. and the product condensed with di-Et glutamate to give II [R = CH2CH2C6H4CONHCH(CO2Et)CH2CH2CO2Et].

IT 136784-81-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and reaction of, in prepn. of antitumor agents)

RN 136784-81-1 HCAPLUS

CN Benzoic acid, 4-[3-(2-amino-4,5,6,7-tetrahydro-7-methyl-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-5-yl)propyl]- (9CI) (CA INDEX NAME)



IT 136784-19-5P 136784-20-8P 136784-23-1P
136784-46-8P 136784-47-9P 136784-48-0P
136784-49-1P 136784-56-0P 136784-58-2P
138262-39-2P

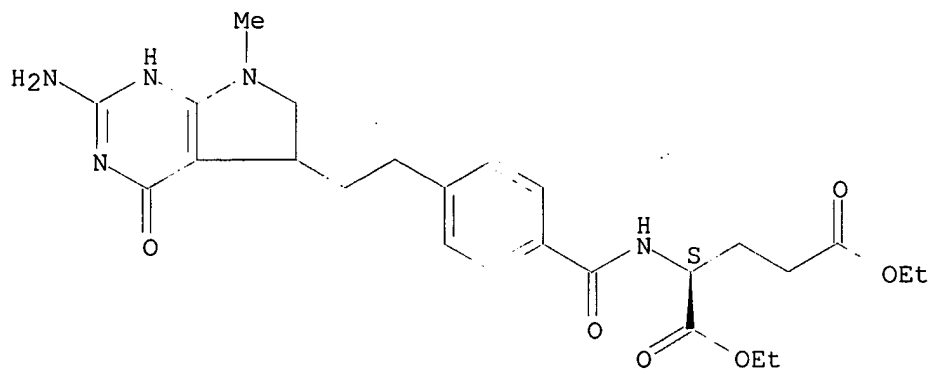
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. of, as antitumor agent)

RN 136784-19-5 HCAPLUS

CN L-Glutamic acid, N-[4-[2-(2-amino-4,5,6,7-tetrahydro-7-methyl-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-5-yl)ethyl]benzoyl]-, diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

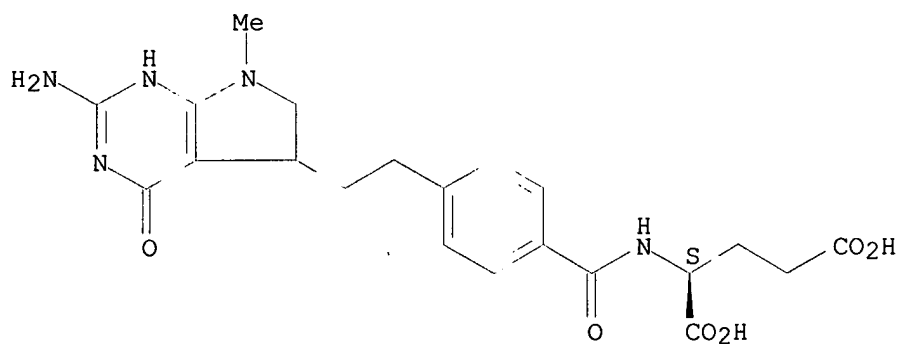
Searched by: Mary Hale 308-4258 CM-1 1E01



RN 136784-20-8 HCAPLUS

CN L-Glutamic acid, N-[4-[2-(2-amino-4,5,6,7-tetrahydro-7-methyl-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-5-yl)ethyl]benzoyl]- (9CI) (CA INDEX NAME)

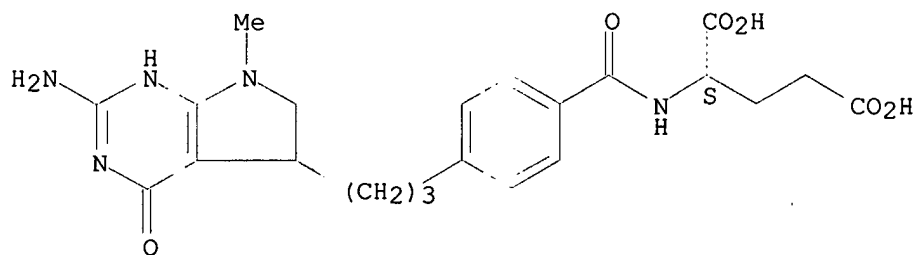
Absolute stereochemistry.



RN 136784-23-1 HCAPLUS

CN L-Glutamic acid, N-[4-[3-(2-amino-4,5,6,7-tetrahydro-7-methyl-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-5-yl)propyl]benzoyl]- (9CI) (CA INDEX NAME)

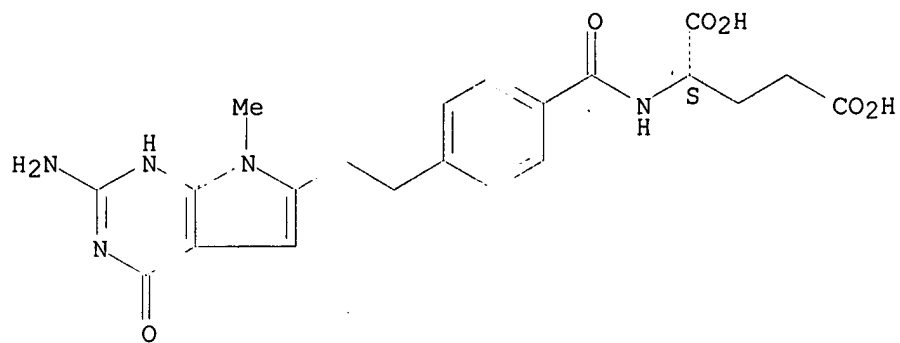
Absolute stereochemistry.



RN 136784-46-8 HCAPLUS

CN L-Glutamic acid, N-[4-[2-(2-amino-4,7-dihydro-7-methyl-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-6-yl)ethyl]benzoyl]- (9CI) (CA INDEX NAME)

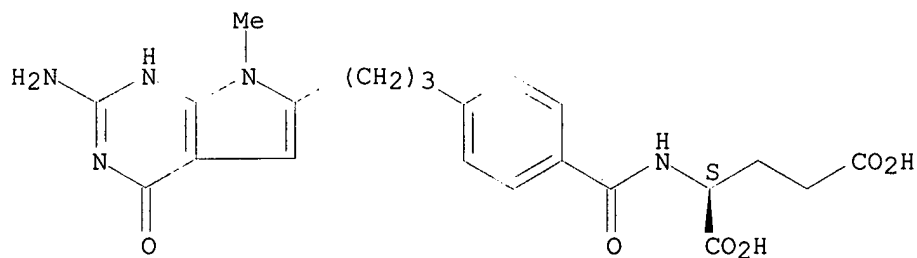
Absolute stereochemistry.



RN 136784-47-9 HCAPLUS

CN L-Glutamic acid, N-[4-[3-(2-amino-4,7-dihydro-7-methyl-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-6-yl)propyl]benzoyl]- (9CI) (CA INDEX NAME)

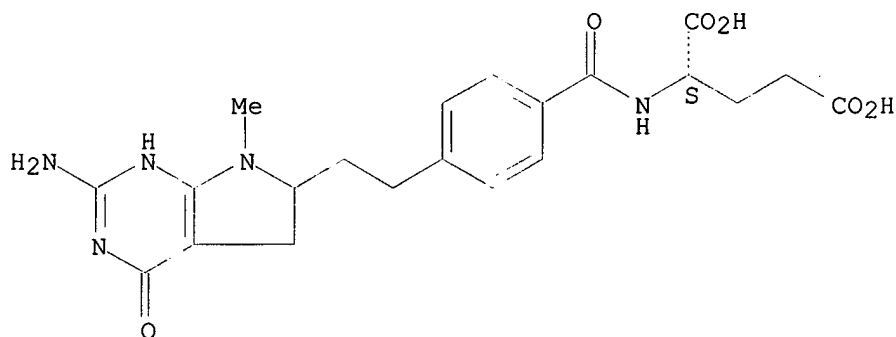
Absolute stereochemistry.



RN 136784-48-0 HCAPLUS

CN L-Glutamic acid, N-[4-[2-(2-amino-4,5,6,7-tetrahydro-7-methyl-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-6-yl)ethyl]benzoyl]- (9CI) (CA INDEX NAME)

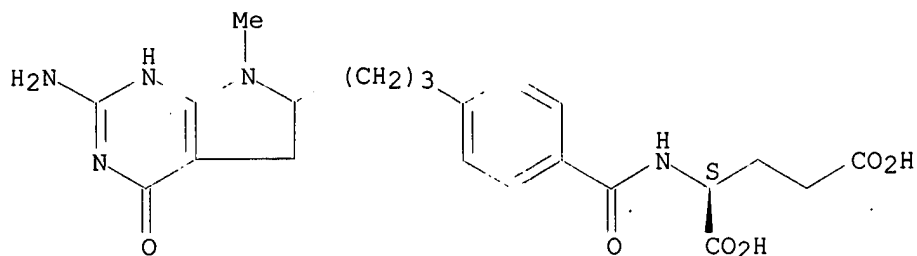
Absolute stereochemistry.



RN 136784-49-1 HCAPLUS

CN L-Glutamic acid, N-[4-[3-(2-amino-4,5,6,7-tetrahydro-7-methyl-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-6-yl)propyl]benzoyl]- (9CI) (CA INDEX NAME)

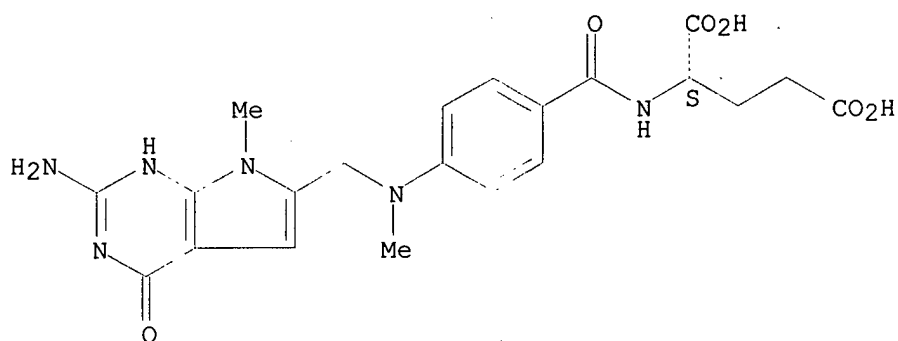
Absolute stereochemistry.



RN 136784-56-0 HCAPLUS

CN L-Glutamic acid, N-[4-[(2-amino-4,7-dihydro-7-methyl-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-6-yl)methyl]methylamino]benzoyl]- (9CI) (CA INDEX NAME)

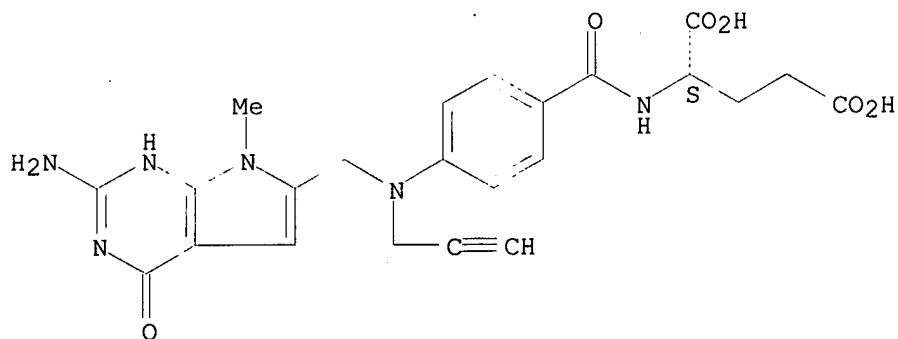
Absolute stereochemistry.



RN 136784-58-2 HCAPLUS

CN L-Glutamic acid, N-[4-[(2-amino-4,7-dihydro-7-methyl-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-6-yl)methyl]-2-propynylamino]benzoyl]- (9CI) (CA INDEX NAME)

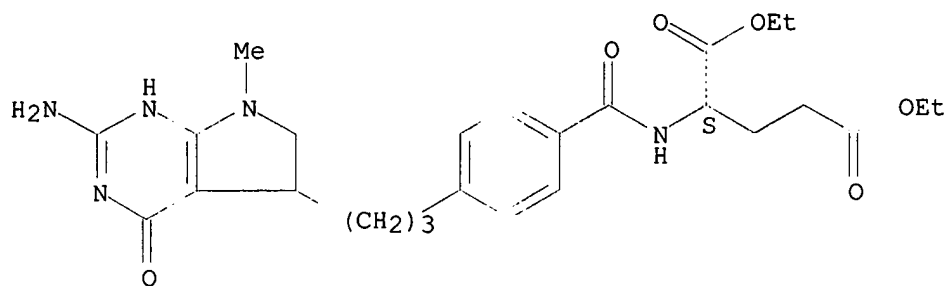
Absolute stereochemistry.



RN 138262-39-2 HCAPLUS

CN L-Glutamic acid, N-[4-[3-(2-amino-4,5,6,7-tetrahydro-7-methyl-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-5-yl)propyl]benzoyl]-, diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 136784-96-8

RL: RCT (Reactant)

(reaction of, in prepn. of antitumor agents)

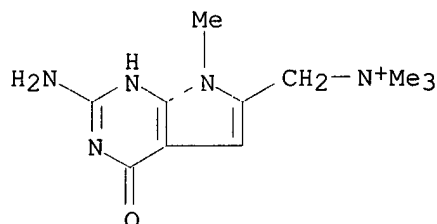
RN 136784-96-8 HCAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidine-6-methanaminium, 2-amino-4,7-dihydro-N,N,N,7-trimethyl-4-oxo-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 136784-95-7

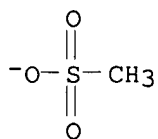
CMF C11 H18 N5 O



CM 2

CRN 16053-58-0

CMF C H3 O3 S



L28 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2002 ACS

1987:614017 Document No. 107:214017 Dextran-linked 7-deazaguanine - a polymer-bound inhibitor of xanthine oxidase. Rosemeyer, Helmut; Kaiser, Klaus; Seela, Frank (Lab. Org. Bioorg. Chem., Univ. Osnabrueck, Osnabrueck, D-4500, Fed. Rep. Ger.). Int. J. Biol. Macromol., 9(4), 205-10 (English) 1987. CODEN: IJBMDR. ISSN: 0141-8130.

AB Dextran-linked 7-deazaguanine as well as 7-deazahypoxanthine and allopurinol derivs. were prepd. by carbodiimide condensation of the 2-carboxyethyl intermediates with N-(6-aminoethyl)carbamoylmethylated dextran T80. The dextran-linked bases are degradable by endo-dextranase (EC 3.2.1.11) as demonstrated by time-dependent viscosity measurements.

Searched by: Mary Hale 308-4258 CM-1 1E01

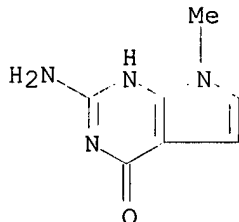
Monomeric as well as polymer-linked purine analogs were tested as inhibitors of xanthine oxidase (EC 1.2.3.1) from cow's milk. Whereas the allopurinol- and 7-deazahypoxanthine derivs. no longer bind to the enzyme, the 7-deazaguanine derivs. are strong competitive inhibitors of xanthine oxidase even in the polymer-linked state.

IT 90065-66-0

RL: BIOL (Biological study)
(xanthine oxidase inhibition by, kinetics of)

RN 90065-66-0 HCAPLUS

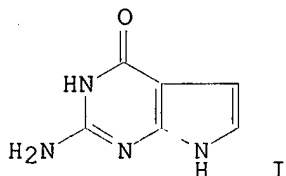
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-1,7-dihydro-7-methyl- (9CI) (CA INDEX NAME)



L28 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2002 ACS

1984:454781 Document No. 101:54781 Isomeric N-methyl-7-deazaguanines: synthesis, structural assignment, and inhibitory activity on xanthine oxidase. Seela, Frank; Bussmann, Werner; Goetze, Andreas; Rosemeyer, Helmut (Dep. Chem., Univ. Paderborn, Paderborn, D-4790, Fed. Rep. Ger.). J. Med. Chem., 27(8), 981-5 (English) 1984. CODEN: JMCMAR. ISSN: 0022-2623.

GI



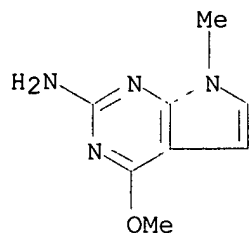
AB The N-monomethyl isomers of 2-amino-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one (I) have been synthesized regiospecifically and their structures assigned. The 3-Me compd. was obtained by alkylation of I with Me2SO4, and the 1-Me isomer was obtained by condensation of (EtO)2CHCH2CH(CN)CO2Et with N-methylguanidine and subsequent cyclization. Methylation of 2-amino-4-chloro-7H-pyrrolo[2,3-d]pyrimidine, with MeI in the presence of 50% NaOH, by phase-transfer techniques, followed by the replacement of halide by hydroxyl, yielded the N7-Me compd. The N3-, N1-, and N7-Me isomers of I were all inhibitors of xanthine oxidase from cow milk with a Ki of 40, 3, and 4.5 .mu.M, resp.

IT 84955-33-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and ether cleavage of)

RN 84955-33-9 HCAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-2-amine, 4-methoxy-7-methyl- (9CI) (CA INDEX NAME)

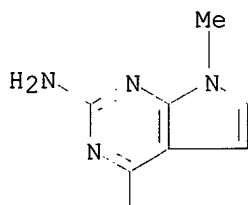


IT 90065-74-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrolysis of)

RN 90065-74-0 HCAPLUS

CN Ethanol, 2-[(2-amino-7-methyl-7H-pyrrolo[2,3-d]pyrimidin-4-yl)thio]- (9CI)
(CA INDEX NAME)



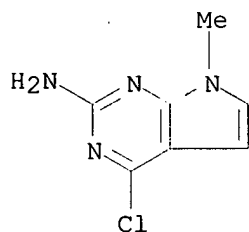
HO-CH₂-CH₂-S

IT 90065-71-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and methoxylation of)

RN 90065-71-7 HCAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-2-amine, 4-chloro-7-methyl- (9CI) (CA INDEX
NAME)

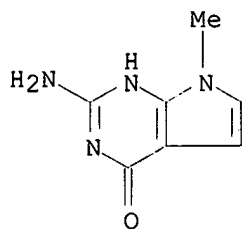


IT 90065-66-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and xanthine oxidase-inhibiting activity of)

RN 90065-66-0 HCAPLUS

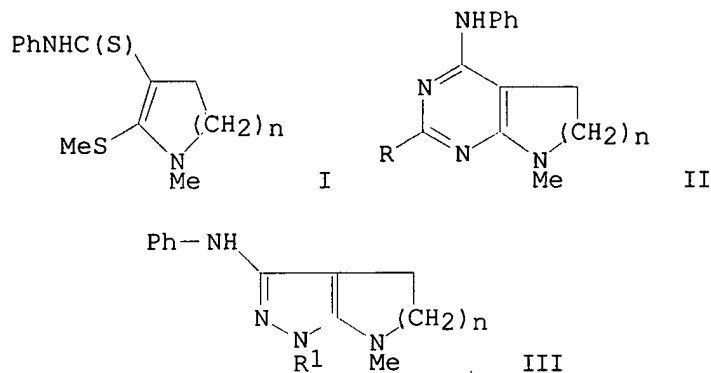
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-1,7-dihydro-7-methyl- (9CI) (CA
INDEX NAME)



L28 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2002 ACS

1983:215558 Document No. 98:215558 Activated lactams: new syntheses of azacycloalka[2,3-d]pyrimidine and -[2,3-c]pyrazole derivatives. Takahata, Hiroki; Nakajima, Tomoko; Yamazaki, Takao (Fac. Pharm. Sci., Toyama Med. Pharm. Univ., Toyama, 930-01, Japan). Synthesis (3), 226-8 (English) 1983. CODEN: SYNTBF. ISSN: 0039-7881. OTHER SOURCES: CASREACT 98:215558.

GI



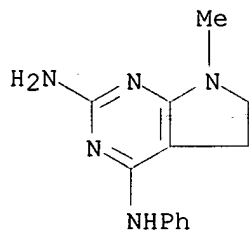
AB Cyclization of enamines I ($n = 1, 2$) with amidines, $RC(:NH)NH_2$, ($R = NH_2, Me, Ph$) and hydrazines, R_1NHNH_2 ($R_1 = H, Ph$), gave 53-71% II and 22-73% III, resp.

IT **85936-63-6P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 85936-63-6 HCAPLUS

CN 5H-Pyrrolo[2,3-d]pyrimidine-2,4-diamine, 6,7-dihydro-7-methyl-N4-phenyl-
(9CI) (CA INDEX NAME)

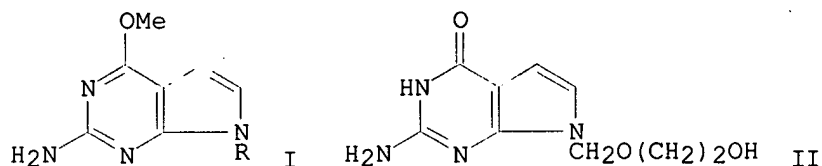


Searched by: Mary Hale 308-4258 CM-1 1E01

L28 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2002 ACS

1983:126554 Document No. 98:126554 Synthesis of acyclo-7-deazaguanosine by regiospecific phase-transfer alkylation of 2-amino-4-methoxy-7H-pyrrolo[2,3-d]pyrimidine. Seela, Frank; Kehne, Andreas; Winkeler, Heinz Dieter (Fachber. Naturwiss. II, Univ. Paderborn, Paderborn, D-4790, Fed. Rep. Ger.). Liebigs Ann. Chem. (1), 137-46 (German) 1983. CODEN: LACHDL. ISSN: 0170-2041. OTHER SOURCES: CASREACT 98:126554.

GI



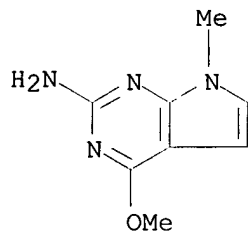
AB Alkylating pyrrolopyrimidine I (R = H) with BrCH₂O(CH₂)₂OAc in the presence of Bu₄N⁺HSO₄⁻ gave 50% I [R = CH₂O(CH₂)₂OAc], whose deacetylation gave 68% I [R = CH₂O(CH₂)₂OH], which was treated with 4-MeSC₆H₄ONa in PhMe-(Me₂N)₃PO to give 69% acyclodeazoguanosine II.

IT 84955-33-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and reactions of)

RN 84955-33-9 HCAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-2-amine, 4-methoxy-7-methyl- (9CI) (CA INDEX NAME)



L28 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2002 ACS

1973:160087 Document No. 78:160087 Chemical studies on tuberactinomycin. V. Structures of guanidino amino acids in tuberactinomycins. Wakamiya, Tateaki; Shiba, Tetsuo; Kaneko, Takeo; Sakakibara, Hideo; Noda, Toshiharu; Take, Teruo (Fac. Sci., Osaka Univ., Toyonaka, Japan). Bull. Chem. Soc. Jap., 46(3), 949-54 (English) 1973. CODEN: BCSJA8.

GI For diagram(s), see printed CA Issue.

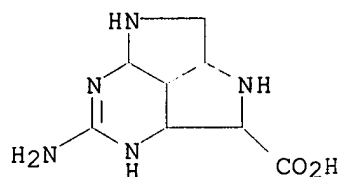
AB Tuberactinomycins A(I), B, N, and O, and component guanidino amino acids capreomycinidine and tuberactidine (II) are discussed. The stereochem. of II was established. During isolation of II from a I hydrolyzate, it was converted to N.alpha.-formyltuberactidine dimer (III). In III alternation between a carbinolamine form of cyclol type and an amide lactone form depended on the pH. III was hydrolyzed to II and viomycinidine with HBr. A pathway for the formation of viocidic acid, formed during hydrolysis of I, was proposed.

IT 19771-55-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

Searched by: Mary Hale 308-4258 CM-1 1E01

RN 19771-55-2 HCAPLUS
CN 1H-1,3,5,7-Tetraazacyclopent[cd]indene-4-carboxylic acid,
decahydro-6-imino-, dihydrobromide, [2aR-(2a.alpha.,4.beta.,4a.alpha.,7a.alpha.,7b.alpha.)]- (9CI) (CA INDEX NAME)



● 2 HBr

L28 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2002 ACS

1972:140698 Document No. 76:140698 Viomycin. I. Structure of the guanidine-containing unit. Bycroft, B. W.; Croft, L. R.; Johnson, A. W.; Webb, T. (Dep. Chem., Univ. Nottingham, Nottingham, Engl.). J. Chem. Soc., Perkin Trans. 1 (6), 820-7 (English) 1972. CODEN: JCPRB4.

GI For diagram(s), see printed CA Issue.

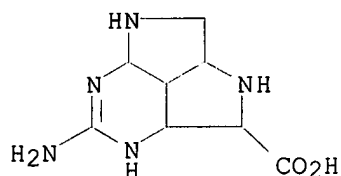
AB Viomycin (I), obtained by acid hydrolysis of the Streptomyces antibiotic viomycin, is an artifact formed by cyclization of the monocyclic guanidinocarbonyl unit (II). I gave capreomycin (III) on hydrogenation and acid hydrolysis, and 2-aminopyridine on alk. hydrolysis, both products being derived from II.

IT 19771-55-2P 22265-96-9P 23250-09-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 19771-55-2 HCAPLUS

CN 1H-1,3,5,7-Tetraazacyclopent[cd]indene-4-carboxylic acid,
decahydro-6-imino-, dihydrobromide, [2aR-(2a.alpha.,4.beta.,4a.alpha.,7a.alpha.,7b.alpha.)]- (9CI) (CA INDEX NAME)



● 2 HBr

RN 22265-96-9 HCAPLUS

CN 1H-1,3,5,7-Tetraazacyclopent[cd]indene-4-carboxylic acid,
decahydro-6-imino-, [2aS-(2a.alpha.,4.alpha.,4a.beta.,7a.beta.,7b.beta.)]-
, compd. with 2,4,6-trinitrophenol (1:2) (9CI) (CA INDEX NAME)

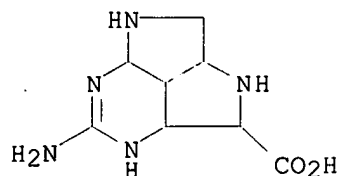
CM 1

CRN 25990-48-1

CMF C8 H13 N5 O2

Searched by: Mary Hale 308-4258 CM-1 1E01

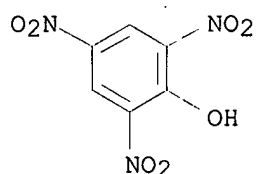
CDES *



CM 2

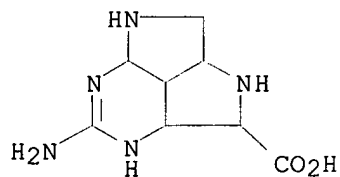
CRN 88-89-1

CMF C6 H3 N3 O7



RN 23250-09-1 HCAPLUS

CN 1H-1,3,5,7-Tetraazacyclopent[cd]indene-4-carboxylic acid,
decahydro-6-imino-, dihydrochloride, [2aR-(2a.alpha.,4.beta.,4a.alpha.,7a.
alpha.,7b.alpha.)]- (8CI, 9CI) (CA INDEX NAME)



●2 HCl

L28 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2002 ACS

1971:411704 Document No. 75:11704 Structures of viocidic acid,
2-(2,3-dichloro-2-pyrrolin-1-yl)-1-pyrroline, and vicanicin. Suddath,
Fred L., Jr. (Georgia Inst. Technol., Atlanta, Ga., USA). 120 pp. Avail.
Univ. Microfilms, Ann Arbor, Mich., Order No. 70-17,969 From: Diss.
Abstr. Int. B 1970, 31(4), 1843-4 (English) 1970.

AB Unavailable

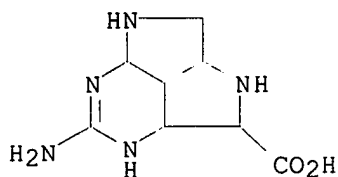
IT 25990-48-1

RL: PRP (Properties)
(crystal structure of)

RN 25990-48-1 HCAPLUS

CN 1H-1,3,5,7-Tetraazacyclopent[cd]indene-4-carboxylic acid,
decahydro-6-imino-, (2aS,4S,4aR,7aS,7bR)- (8CI, 9CI) (CA INDEX NAME)

Searched by: Mary Hale 308-4258 CM-1 1E01



L28 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2002 ACS

1970:449402 Document No. 73:49402 Structure and absolute configuration of viocidic acid: x-ray analysis of viocidic acid dihydrobromide. Coggon, Philip (Dep. of Chem., Duke Univ., Durham, N. C., USA). J. Chem. Soc. B (5), 838-45 (English) 1970. CODEN: JCSPAC.

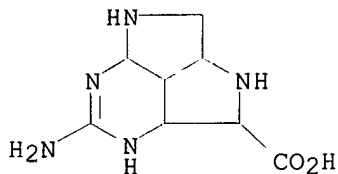
AB The constitution and abs. stereochemistry of viocidic acid, a degradation product of viomycin, has been established by an x-ray crystal structure anal. of its dihydrobromide, C₈H₁₃N₅O₂·2HBr·3H₂O. Crystals are orthorhombic, space group P2₁2₁2₁, with Z = 4 in a unit cell of dimensions a 8.17, b 12.17, and c 15.22 .ANG.. The at. coordinates were detd. by Fourier and least-squares calcns. and the final R value was 7.6% for 1408 independent reflections. The structure comprises dipos. C₈H₁₅N₅O₂ ions, bromide ions, and H₂O mols.: H bonding is the dominant feature of the intermol. packing.

IT 28964-50-3

RL: PRP (Properties)
(crystal structure of)

RN 28964-50-3 HCAPLUS

CN 1H-1,3,5,7-Tetraazacyclopent[cd]indene-4-carboxylic acid,
decahydro-6-imino-, dihydrobromide, trihydrate, (2aS,4S,4aR,7aS,7bR)-
(8CI) (CA INDEX NAME)



● 2 HBr

● 3 H₂O

L28 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2002 ACS

1969:106452 Document No. 70:106452 Structure, stereochemistry, and reactions of the guanidine moiety of viomycin. Bycroft, Barrie W.; Croft, L. R.; Johnson, Allen Woodward; Webb, Tessa (Univ. Nottingham, Nottingham, Engl.). J. Antibiot. (Tokyo), 22(3), 133-4 (English) 1969. CODEN: JANTAJ.

GI For diagram(s), see printed CA Issue.

AB Viomycin (I), contg. the unit A, was refluxed for 24 hrs. with 10N HCl; ion exchange chromatog. (Dowex 50 WX8) of the acid hydrolyzate yielded 2 basic amino acids, viomycinidine (II), m. 200-4.degree., and viocidic acid

(III); dipicrate m. 173-5.degree.; dihydrochloride m. 210-12.degree.. III gave a yellow ninhydrin reaction and a neg. Sakaguchi test. Based on the structure of III, abs. chirality was tentatively assigned for I and II at the .alpha. and .beta. centers. Catalytic redn. of I.HCl with PtO2 in 3N HCl followed by acid hydrolysis gave no II, but yielded capreomycin, m. 195.degree. (decompd.), [.alpha.]2D2.5 -22.7 (H2O), isolated as the free base. Mild base hydrolysis of I with 0.1N NaOH at 100.degree. for 20 hrs. followed by Et2O extn. yielded 2-aminopyrimidine (IV), m. 127-8.degree.. Because II was not present in the total hydrolyzate of the resultant peptides, IV must have been obtained from the guanidine moiety.

IT 22265-96-9P 23250-09-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 22265-96-9 HCAPLUS

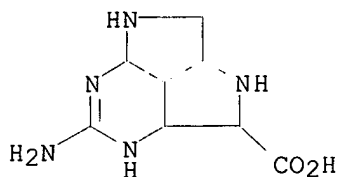
CN 1H-1,3,5,7-Tetraazacyclopent[cd]indene-4-carboxylic acid,
decahydro-6-imino-, [2aS-(2a.alpha.,4.alpha.,4a.beta.,7a.beta.,7b.beta.)]-
, compd. with 2,4,6-trinitrophenol (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 25990-48-1

CMF C8 H13 N5 O2

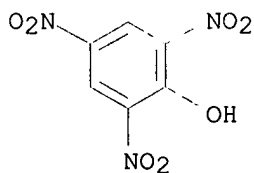
CDES *



CM 2

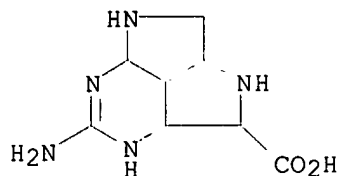
CRN 88-89-1

CMF C6 H3 N3 O7



RN 23250-09-1 HCAPLUS

CN 1H-1,3,5,7-Tetraazacyclopent[cd]indene-4-carboxylic acid,
decahydro-6-imino-, dihydrochloride, [2aR-(2a.alpha.,4.beta.,4a.alpha.,7a.
alpha.,7b.alpha.)]- (8CI, 9CI) (CA INDEX NAME)



●2 HCl

L28 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2002 ACS

1968:487468 Document No. 69:87468 Viomycin. Further degradative studies. Bycroft, B. W.; Cameron, D.; Croft, L. R.; Johnson, A. W.; Webb, Tessa; Coggon, P. (Univ. Nottingham, Nottingham, Engl.). Tetrahedron Lett. (25), 2925-30 (English) 1968. CODEN: TELEAY.

GI For diagram(s), see printed CA Issue.

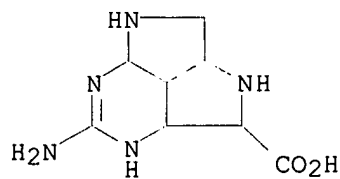
AB Mild hydrolysis of viomycin with 0.1N aq. NaOH gave 2-aminopyrimidine as well as a peptide mixt. (I). Chromatog. of I gave a cryst. dipeptide which was hydrolyzed to glycine and .alpha.,.beta.-diaminopropionic acid, indicating that the dipeptide is .alpha.,.beta.-diaminopropionylglycine. Acid hydrolysis of I gave glycine, .beta.-lysine, .alpha.,.beta.-diaminopropionic acid, and serine, indicating that viomycin obtained from acid hydrolysis of viomycin is replaced by 2-aminopyrimidine and glycine in the alk. hydrolysis product. Hydrogenation of viomycin followed by total acid hydrolysis gave .alpha.-(2-iminohexahydro-4-pyrimidinyl)glycine. These results are explained by assuming the existence of the unit II in viomycin. Another degradation product, viocidic acid, was isolated as C₈H₁₃N₅O₂.2HBr.H₂O and crystallized in the orthorhombic system group P2₁2₁2₁, with 4 mols. per unit cell of dimensions a 8.17, b 12.17, and c 15.22 Å.

IT 19771-55-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 19771-55-2 HCAPLUS

CN 1H-1,3,5,7-Tetraazacyclopent[cd]indene-4-carboxylic acid, decahydro-6-imino-, dihydrobromide, [2aR-(2a.alpha.,4.beta.,4a.alpha.,7a.alpha.,7b.alpha.)]- (9CI) (CA INDEX NAME)



●2 HBr

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L29 1 L3

=> d

L29 ANSWER 1 OF 1 CAOLD COPYRIGHT 2002 ACS
 AN CA54:8840f CAOLD
 TI possibility of evaluating the av. lifetime of the .alpha.-substructure within the nucleus
 AU Serebrennikov, Yu. I.
 IT 271-70-5 1421-27-8 1500-85-2 3680-69-1 3680-71-5 7355-55-7
 7400-05-7 7400-06-8 7752-54-7 38897-11-9 39929-79-8 52133-67-2
 52133-68-3 57564-92-8 60972-04-5 60972-05-6 60972-21-6 62981-81-1
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 99975-97-0 99991-98-7 100047-45-8 100051-84-1 100137-44-8 100383-13-9
 100396-59-6 100401-97-6 100453-73-4 102879-75-4 103648-99-3 108397-77-9
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 116154-73-5 120745-73-5

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